

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,244	03/02/2004	Jin-Oh Kwag	8071-139T (OPP 041939US)	9894
F. Chau & Associates, LLC 130 Woodbury Road			EXAMINER	
			DUONG, TAI V	
Woodbury, NY 11797			ART UNIT	PAPER NUMBER
			2871	
			MAIL DATE	DELIVERY MODE
			06/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/790,244	KWAG ET AL.			
		Examiner	Art Unit			
	·	Tai Duong	2871			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
WHIC - Exter after - If NO - Failur Any n	CRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DAISIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing departed term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONED	I. lely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status		,	•			
2a)☐ 3)☐	Responsive to communication(s) filed on <u>05 Ju</u> This action is FINAL . 2b) ☑ This Since this application is in condition for allowan closed in accordance with the practice under E	action is non-final.				
Disposition of Claims						
5)□ 6)⊠ 7)⊠	Claim(s) 18 and 20-22 is/are pending in the apple 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 18 and 22 is/are rejected. Claim(s) 20 and 21 is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers						
10) 🗀 -	The specification is objected to by the Examiner The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correcti The oath or declaration is objected to by the Example.	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/955,218. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
2) Notice Notice 3) Inform	e of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	ite			

Application/Control Number: 10/790,244

Art Unit: 2871

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/05/2007 has been entered.

The new sheet of Figs. 10A-10B has been accepted. However, the new sheet of Figs. 11A-11B has *not* been accepted because Figs. 11A-11B are not consistent with Figs. 1, 3, 5 and 6. Figs. 1, 3, 5 and 6 disclose three pixel portions and two openings 81 while Figs. 11A-11B show two pixel portions and one opening.

The objections and the rejections in the last Office action are withdrawn in view of the amendments to the claims and Applicant's remarks.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an

Application/Control Number: 10/790,244

Art Unit: 2871

invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 18 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3 and 13 of U.S. Patent No. 6,700,635. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 3 and 13 of the above patent disclose all the recited features of the instant claim 18. Thus, claim 18 is anticipated by claims 3 and 13 of the above patent.

Claim 20 is objected to because the recited phrase "said electrode and the pixel electrode both include openings" is not clear. It is noted that claim 18 already recites the pixel electrode having a plurality of openings. Correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al (US 6,573,964) in view of Matsuyama (US 2004/0189914).

Takizawa et al disclose in Fig. 5 a liquid crystal display (LCD) comprising a pixel electrode 1 having a plurality of openings 1A and a plurality of projected portions 10 on the first substrate 20. The only difference between the LCD of

Art Unit: 2871

Takizawa et al and that of the instant claim is outlines of the pixel electrode being curved. Matsuyama discloses in Fig. 2 that the outlines of the pixel electrode can be curved (paragraph 0054). Thus, it would have been obvious to a person of ordinary skill in the art in view of Matsuyama to employ in the LCD of Takizawa et al the outlines of the pixel electrode being curved for reducing generation of disclination, as compared with the outlines of the pixel electrode being rectangular.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al and Matsuyama as applied to claim 18 above, and further in view of Sasaki et al (US 6,879,364).

Takizawa et al disclose in Fig. 5 a common electrode 26 formed on a second substrate and a protrusion 11. The only difference between the LCD cited in the above rejection of claim 18 and that of the instant claim is the (common) electrode of the second substrate including openings. Sasaki et al disclose that slits, holes or protrusions can be used as a means for forming the boundary of alignment of the LC molecules (col. 27, lines 40-49). Thus, it would have been obvious to a person of ordinary skill in the art in view of Sasaki et al to employ in the LCD cited in the above rejection of claim 18 the electrode of the second substrate including openings as a means for forming the boundary of alignment of the LC molecules.

Claims 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2871

Claims 20 and 21 are allowed over the prior art of record because none of the prior art discloses or suggests a LCD having structure recited in claim 18 *in combination* with the feature "wherein a shape of each portion of the pixel electrode divided by the openings is substantially a curved rectangle" or "wherein a shape of each portion of the pixel electrode divided by the openings is substantially circular".

Any inquiry concerning this communication should be directed to Tai Duong at telephone number (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

TOAN TON
PRIMARY PATENT EXAMINER

TVD

06/07